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Attitudes Toward and Extent of Leasing in the Printing Industry

Raymond Joseph Prince

ATTITUDES TOWARD AND EXTENT OF LEASING

IN THE PRINTING INDUSTRY

BY

RAYMOND JOSEPH PRINCE

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This thesis is approved as a creditable and independent investigation by a candidate for the degree, Master of Science, and is acceptable as meeting the thesis requirements for this degree, but without implying that the conclusions reached by the candidate are necessarily the conclusions of the major department.

Thesis Adviser   Date

Head, Major Department   Date

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CHAPTER I

INTRODUCTION

Reasons for Undertaking the Study

Since 1955 the printing industry has been looking at leasing as a means of financing. There has been controversy over the advantages and disadvantages of leasing and what benefits it can be expected to offer.

This project was undertaken because of the small amount of research in this area and because of the lack of a combined body of knowledge about leasing. A third reason for undertaking this study was because of the financial pressure, especially in this continued era of tight money, which forces the search for new answers to capitalization.

Objectives of the Study

The first objective of this study was to determine the advantages and disadvantages of leasing as a means of financing. The second objective was to determine the extent of leasing in the printing industry. The third objective was to determine the printing industry's attitudes toward the leasing of equipment.

Methodology of the Study

The study was carried out by mailing a questionnaire, covering letter, and business reply envelope to each commercial printer in the sample. The complete questionnaire may be found in Appendix A and the covering letter for the first mailing in Appendix B. Appendix C is the covering letter for the second mailing of the questionnaire.

The first mailing was on May 2, 1966, and the second mailing on May 17, 1966. Because of the time required to make the necessary tabulations, the cut off date was June 6, 1966. After this date only a few questionnaires were received.

The questionnaire was divided into three parts: one, for those printing establishments which did not lease; two, for those which did lease; three, necessary demographic information.

Questions were precoded for IBM tabulation, except for the open-end questions. Hereafter the questions will be identified by column numbers used in IBM coding.

The first thirteen columns were questions for commercial printers who were not leasing. Columns 1-9 of the questionnaire were used for questions concerning what types of equipment, if any, non-leasing printers might consider leasing. Columns 10, 11, and 12 were used for determination of company policy regarding leasing. Column 13 was used for recording the major reasons given for choosing leasing as a means of financing.

Columns 14 through 61 were for answers from firms that currently lease equipment. Columns 14 through 26 asked in which years the company did lease equipment. This question was used to compare the acceptance of leasing in the printing industry to that of all manufacturing industries.

Column 27 was used to give an indiction of what company policy will be in the future in regard to leasing.

What type of equipment is currently being leased was obtained from columns 28 through 36. This information was used to compare what types of equipment were being leased with what types of equipment non-leasors would lease.

Column 37 was used to ascertain who printers predominently lease from: manufacturers, leasing companies or a combination.

Column 38 showed the company policy toward leasing as a means of financing. Column 39 was used to find the extent of sale-leasebacks of plant or equipment. Column 40 was used to find the dollar volume of leasing of the individual firm. In columns 41 through 50 the company was asked to rank the three major reasons for leasing.

Two selling points often made by leasing companies were presented in columns 52 and 53 and the respondent was asked if he felt they were true or not true. Column 51 was another statement which the respondent was asked if he found true. This statement is generally assumed to be true by both leasing companies and lessees.

Column 54 asked the cost of the lease, excluding service or maintenance charges. The question was explicit in wording because many leasing companies disguise the actual cost of the lease. Column 55 asked the respondent to check the type of payment schedule that the lessor had set. On large pieces of equipment the "humpback lease schedule" has advantages for the printing firm and this question would be expected to give an indication of the extent to which such a schedule was used. Columns 56 and 57 were used to find if there were any tax savings as a result of leasing.

Columns 58, 59, 60, and 61 were open-end questions asked to find the major advantage and disadvantage of leasing compared to equity financing and debt financing.

Columns 62 through 66 were demographic questions used to categorize the printing companies.

The covering letter for the first mailing mentioned that this survey was for a thesis and that the thesis topic was, "Attitudes Toward and Extent of Leasing in the Printing Industry."

The letter also stressed that the survey would be anonymous by specifying that no company's name would be used explicitly or implicitly in the thesis. The questionnaires were numbered so that firms to receive a second mailing could be identified. In no case was the number to be used to identify the company for the presentation of that firm's answers.

The letter briefly thanked each recipient for helping to make the study possible. Throughout the letter the importance of the study and the benefit to the printing industry was stressed. Finally, the letter asked that if the recipient would rather have another person complete the questionnaire, would he kindly forward it to possibly the financial officer of the firm.

The covering letter for the second mailing was much the same as the letter for the first mailing, except that the need for cooperation and importance of the study were stressed more.

The questionnaires were addressed to the "President" or the top official of each commercial printing firm. It was felt that these individuals would be in a position to gather the information or to direct the questionnaire to a qualified person for completion.

The covering letter was printed on a South Dakota State University letterhead and the forwarding envelope had a South Dakota State University return address. This was an attempt to convey a final note of authenticity to the study.

The sample for this study was obtained from R. L. Polk and Company, 431 Howard Street, Detroit, Michigan. The sample consisted of commercial printers in the United States job-rated at $500,000 and over. The list also contained the name of the president or top official of each firm. The $500,000 job rating was chosen because firms of this size and over are classified as medium and large printing plants. Therefore, their business controls, finances, statements and procedures should be sophisticated enough to permit answering the questionnaire with some degree of understanding of the subject.

Questionnaires were mailed to 453 printing plants on the first mailing and 301 on the second mailing. The response was 152 replies to the first mailing and 51 replies to the second mailing. This represented a total return of 44.81 per cent. Of these replies, 25 were disqualified leaving a 39.29 per cent usable return.

CHAPTER II

REVIEW OF THE LITERATURE

Leasing is not to be confused with renting. Leasing is a long-term arrangement, whereas renting is a short-term affair in which the rental firm rents out new and used pieces of equipment for brief periods, reclaims them at the end of the period, then rents the equipment to other users.

The average before-tax rate of profit on net working capital for the printing industry is 39 per cent, which is a powerful impetus to keep cash intact and turning over. Fixed assets represent an average of 60 per cent of the industry's net worth, one of the highest ratios in all industry. This should discourage printers from freezing still greater amounts of money in fixed assets.

Some specific reasons for the current growth of equipment leasing are:

1. Profit-producing equipment is put to work without capital investment. This is particularly important because working capital remains tight, despite the slight improvement resulting from inventory liquidation.

2. To increase the profits without increasing a company's own capital investment.

3. To increase production without reducing liquidity of working capital.

4. To reduce the risk of loss caused by rapid obsolescence of specialized equipment.

5. To obtain equipment for limited-term use, either for special orders or for development or research work. (This is particularly important where firms are involved in defense contract work).

6. For manufacturers of industrial equipment, leasing programs have proved to be an effective method of increasing sales.

To uncover the latest trends in corporate leasing, the Foundation for Management Research conducted a survey of 4,443 companies for Business Management.[1] Nearly one-third (1,337) of the companies questioned replied. Here are the results:

1. Leased equipment in 1955...

   411, or 30.7%, of 1,337 companies replying

2. Leased equipment in 1960...

   730, or 54%
   607 not leasing (46%)

3. Of 730 companies presently leasing...

   384 will increase their leasing
   271 will maintain their current lease volume
   62 will reduce their leasing volume, but continue to lease
   13 will eliminate all leasing

4. Of 597 companies not presently leasing...

   96 are actively considering leasing equipment
   412 may lease equipment in the future
   33 are not interested in leasing at present
   50 don't know what their plans are

5. Of 730 companies presently leasing...

   474 are leasing from manufacturers
   376 are leasing from leasing companies
   (Total is greater than number of companies replying, because some are leasing from both sources).

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[1] R. Sheridan, "Look Before You Lease; Nine Areas to Check," Business Management, Vol. 149, No. 9 (September 1962), p. 60. This Chapter draws heavily on the literature cited.

6. Of 730 companies presently leasing equipment...

682 are leasing production equipment
428 are leasing office equipment
91 are leasing buildings (other than standard buildings) and fixtures

7. Of 1,337 companies replying...

534 term leasing a permanent part of management thinking
560 term leasing a good method for temporary use to conserve working capital
93 term leasing a method to be used only in an emergency

8. In 1,337 companies replying, the following officers make the leasing decision:

President	852
Treasurer	366
Controller	247
Division Heads	153
Department Heads	133
Board Chairman	113
Secretary	90
Vice President	72
Exec. Vice Pres.	71
General Manager	48
Board of Directors	43
Management Comm.	12

9. Of 1,337 companies replying...

112 have negotiated sale-leasebacks of plant and equipment
61 were considering sale-leasebacks of equipment
459 were interested in future sale-leasebacks

10. Of 730 companies leasing equipment...

31 were leasing $1,000,000 or more
24 were leasing \$ 500,000 to $1,000,000
164 were leasing \$ 100,000 to \$ 500,000
93 were leasing \$ 50,000 to \$ 100,000
110 were leasing \$ 25,000 to \$ 50,000
153 were leasing \$ 5,000 to \$ 25,000
148 were leasing less than $5,000

(not all firms replied)
median lease $39,500

11. Major reasons for leasing...

695 Conserve working capital
461 Obtain equipment without investment
211 Improve cash flow
139 Obtain tax-timing benefits
122 Obtain faster writeoff of equipment costs
117 Obtain long-term financing
90 Increase borrowing capacity
56 Obtain equipment for pilot projects
30 To guard against early obsolescence
17 Miscellaneous

<u>Advantages and Disadvantages of a Lease</u>

Leasing companies claim many advantages for their plan, but do not mention any disadvantages. In the following section, the investigator will point out the advantages and pitfalls of leasing.

The advantages of leasing are:

1. Leasing offers financing without dilution of ownership or control.

2. In leasing, there is no necessity for a periodic clean-up of funds or a pledge of receivables.

3. Leasing may offer certain tax-timing advantages in specific instances.

4. Leasing makes for a cleaner balance sheet. Only the lease payments due within twelve months appear on the balance sheet, thus barely affecting the ratio of current assets to current debt. As a result, a company can still use its established lines of credit for short-term borrowing.

Leases are usually written on a uniform payment basis although they can be written on a straight-line, declining balance, sum-of-the-years digits, or any schedule preferred by the user.

It is often pointed out that the leasing of equipment frees capital for other purposes of the business. It is not freeing of capital that is the important thing, but whether the best use is made of the cash that has been made available.

When a management has used all available sources of credit and still does not wish to add any more new capital to the business, a lease contract will answer the requirement of obtaining funds to purchase a piece of equipment. Although the leasing companies will check the credit standing of a prospective lessee, they are not as exacting as banks or other loaning organizations.

Leasing firms often provide highly specialized legal and tax advice along with their rented wares. In the case of defense contracts, leasing becomes even more advantageous; the government permits rental charges to be included in cost-plus-fixed-fee contracts, but excludes the interest on money borrowed to buy equipment.

Moving a step farther, leasing companies have been adopting a sale-leaseback device often used by real-estate men. As a result, businessmen who find they have been taking excessive depreciation on equipment and are faced with heavy deferred taxes now can find an easy solution. They simply sell their equipment to a leasing firm, get a capital gain to generate cash and lease back the equipment to continue using it.

Straight term lease covers a period equal to about 75 per cent of the useful life of the equipment.

One leasing company argues that leasing permits the user to pay for fixed assets with earnings that those assets produce. Thus, by implication, the money that would otherwise be tied up in these assets is available for other profitable uses. However, this can be equally true of financing by means of a sales contract or a loan. Proponents of leasing may retort that the elimination or reduction of the down-payment frees at least some cash. But this viewpoint is valid only when leasing is compared with a secured loan. If the firm can borrow the full amount either on an unsecured loan or a loan secured in part by other assets, this advantage does not exist.

The problem can be simplified by relating the cost of leasing to the cost of capital. Generally speaking, debt capital is cheap (particularly with its tax advantage) and equity capital is expensive; however, the amount of debt capital that a firm can obtain relative to its equity is limited. If a firm can obtain additional funds through lease financing--thus increasing the proportion of debt to equity--then the average cost of the capital will be less. If, on the other hand, lease financing merely replaces conventional debt to equity, then no advantage is gained.

There are a number of general rules to obtain maximum benefits (and cash) via sale-leasebacks.

1. Do not handle sale-leasebacks piecemeal. Instead, go for larger amounts involving as much of your equipment as possible. The larger the amount, the better the rate, the more immediate the impact on a business.

2. Second, do not settle for chattel mortgage equivalents in sale-leasebacks. Chattel mortgages on used equipment usually range from 25 per cent to 65 per cent on the current market value of the equipment, with the average under 50 per cent. This approach to sale-leasebacks is usually taken by leasing subsidiaries of firms which also handle chattel mortgages. In addition, rates on chattel mortgages are usually quite high, ranging from 13 per cent to 20 per cent.

A further disadvantage of a chattel mortgage is that it involves public notice of the existence of the mortgage.

Another claim for leasing is that it offers a hedge against inflation. A firm gets the asset today and pays for it with depreciated dollars in the future. This again is also true of debt financing. Furthermore, leasing suffers in comparison with direct borrowing in that the company does not own the asset after it has finished paying for it. With the prospect of continued inflation, the loss of residual values may prove a substantial disadvantage to companies leasing their assets.

It is frequently pointed out that leasing avoids any dilution of common stock ownership or control. This advantage is apparent when compared to equity financing, but it is an advantage which is shared by all forms of straight debt financing.

Both lessors and lessees agree that leased equipment depreciates faster than owned equipment by an average figure estimated at 20 per cent.

Operating Situations that make Leasing Advantageous

1. In general, where companies can expand their operations profitably, if additional equipment and machinery were made available at smaller annual expense than through use of their own capital.

2. Companies which find themselves short of working capital, but which have sufficient equipment, can remedy the situation through sale-leaseback transactions.

3. Companies faced with competition that is using the latest equipment while they themselves lag on cost-saving. In this situation, acquiring the new equipment is essential, but often a large initial cost is prohibitive. Leasing can often provide the solution.

4. Companies which hold a tight check-rein on capital expenditures and financial ratios. Leasing permits the management of these companies to secure new equipment without forcing the board of directors to raise more capital.

5. Where rapid obsolescence of equipment is a strong possibility, leasing by-passes the problem of capital investment in such equipment.

6. For pilot plants, development or experimental projects, leasing offers a means of opening new areas of production without draining working capital on such unproved ventures.

7. Companies engaged in defense contract work are often enabled, through leasing, to obtain needed equipment for the term of the contract. In this way, capital is not frozen in equipment which may not be useful after the contract has been fulfilled.[2]

Although a seven-year lease may cost more than a five-year lease, long-term money is an extremely valuable commodity. The longer term gives the lessee more maneuverability to handle unforseen developments.

Prospective lessees should beware of rate charts that state "purchase option at end of lease." As far as the Internal Revenue Service is concerned, one of the key tests as to whether a lease is truly a lease is the nature of the purchase option. Internal Revenue Service rules are explicit on this point: purchase at the end of a lease should be at fair market value for the equipment at that time. Moreover, options which are slightly larger than one dollar--such as one per cent or two per cent of the original purchase price--also fall within the ruling limit.

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[2]R. Sheridan, "Equipment Leasing in the Printing Industry," Graphic Arts Monthly, Vol. 32, No. 10 (October 1960), p. 25.

Where purchase options are desired, the safest rules to follow are these: Do not apply any of the lease charges to establish equity in the equipment. Make the option at a level that is clearly intended to meet the "fair market value rule".

The typical declining payment schedules are loaded in favor of the lessor. The typical declining payment schedule on a three-year lease will require that the lessee pay the last three months in advance as a security deposit, pay 45 per cent in the second twelve months, and the balance in the final year. Under this plan, 50 per cent of the total is paid in the first year, 85 per cent in the first two years.

Lease charges in these plans will seem to average six per cent to seven per cent per year of the original purchase price of the equipment. However, if a proper calculation is made, based on the total outstanding at each given month, it will be seen that charges are actually two and one-half to three times this figure.

Many uneven payment schedules can be helpful. For example, a large Indiana printing company required $155,000.00 worth of presses and other equipment to support an expansion of its operations. However, as the management explained, it would be two years before the new equipment built up to peak use and began to pay its way.

To solve this company's problem, what is called a "humpback lease plan" was used. Under this plan, (a seven-year lease, in this particular instance), payments are low in the first two years, rise in a curve in the middle three years, and then decline in the final two years. This plan meets the lessee's need for a lower payment when sales have not yet developed, increase when performance is at peak levels, and level off as equipment gets older.

Many lease plans include a single rate which covers equipment costs and service contracts. In these cases, managers would do well to ask what portion of the lease charge bears on equipment costs, and what portion covers service charges. In some situations, the inclusion of service charges has been used to conceal high lease charges.

In any event, it makes little sense for a company to lease its service contracts, because these are usually based on a monthly charge. The company which does is merely adding a leasing charge to the monthly service charge, without gaining any benefit in saving working capital.

The lessee is entitled to pay the cash price for the equipment leased and not the standard rate. Paying the standard rate is in violation of the Robinson-Patman Law which requires discounts to be offered without discrimination to all customers.

Seven steps to be followed in considering a leasing program are:[3]

1. Decide whether... the equipment should be acquired using the cash purchase price on the company's investment opportunity rate to evaluate the proposed investment.

2. Compare the after-tax cost of such cash purchases by deducting the present value of the future tax deductions from the original cost of the equipment.

3. Estimate the company's BIR (Basic Interest Rate) at which it could borrow an amount equal to the purchase price of the equipment. This step prepares the way for a comparison

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[3]Richard F. Vancil, "Lease or Borrow — New Method of Analysis," Harvard Business Review, Vol. 39, No. 5 (September 1961), p. 122.

either of debt-and-lease-financing plans or of different leasing plans.

4. Discount the future lease payments at the BIR to determine the "equivalent purchase price" of the equipment. Any excess over the actual purchase price is the "lessor's premium".

5. Estimate an imputed interest charge (at the BIR) from each lease payment. The remainder of each payment is analogous to the depreciation deduction.

6. Submit the present value of the "equivalent depreciation" deduction (discounted at the opportunity rate) from the "equivalent purchase price" determined in the fourth step. The balance is the after-tax case of the leasing plan stated in comparable terms (no financing charges) to the cost of purchasing determined in the second step.

7. Adjust the cost of the leasing plan for (a) any auxiliary financing costs that the lessee will avoid, and (b) the residual value of the equipment which will not be received by the lessee.

<u>Capitalizing Leases</u>

Leasing has been said to have many advantages as a form of financing new or used equipment. One of the advantages claimed for leasing is that leasing makes for a cleaner balance sheet. Only the lease payments due within twelve months appear on the balance sheet, thus barely affecting the ratio of current assets to current liabilities. Leasing will also affect many other ratios as will be pointed out. As a result, a company can still use its established lines of credit for short-term borrowing. For example, an airline company which has acquired the use of engines under long-term lease arrangements to propel its jet aircraft discloses no dollar amount in the balance sheet for (a) the value of such engines or the right to their exclusive use, (b) the obligation resulting from such a financial arrangement. The balance sheet reflects jet aircraft without engines and the liabilities shown therein exclude the fixed obligation for the use of the engines.

__Arguments for Capitalization of Leases__

Accountants generally agree that footnotes are not a substitute for proper financial statement presentation; footnotes can and should be used, where necessary, to amplify and explain captions and amounts in financial statements. In most instances, footnotes relating to long-term lease obligations compel the reader to complete the job which properly belongs to the accountant.

If a firm decides to capitalize its lease obligations, the amount shown would not be "assumed" but would represent the present value of the lease payments to be made. Such a factual representation should not mislead anyone; to the contrary, its omission can be misleading because of the difficulty the reader would have in evaluating narrative disclosures.

Referring to the argument for not capitalizing leases, it can be pointed out that the reserves for pensions, vacations, contingent claims, severance pay, etc., may not be legal liabilities and thus have many of the same characteristics ascribed to capitalized lease obligations, but many of these are reported and shown in balance sheets of various companies without objection.[4]

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[4]John L. Hennessy, "Recording of Lease Obligations and Related Property Rights," __The Journal of Accountancy__, Vol. 111, No. 3 (March 1961), p. 41.

When accountants suggest that lease obligations be included in the financial statements, one proponent of leasing is concerned that: "The financial impact of a lease transaction upon termination by the lessee may be nothing or may be substantial."[5] Accountants and the financial community do not presume liquidation of the company when presenting the financial statements unless conditions so indicate. In the event of financial difficulty, the financial impact becomes different with respect to many obligations, liabilities, reserves, etc., and not just leases.

If a comparison were made of the financial statements of an owner-user and a lessee, the following "errors" would appear in the statements of the lessee:

"1. An understatement of assets
2. An understatement of liabilities
3. An understatement of amortization (depreciation) during the early part (perhaps one-half) of the lease and an overstatement for the balance of the lease
4. An overstatement of operating income and of net income in the early years of the lease period — then an understatement
5. An understatement of accumulated amortization and therefore overstatement of remaining book value of lease
6. As a result of (3), (4), and (5) above, the understatement of liabilities will gradually become greater than the understatement of assets, resulting in an overstatement of owners' equity. This overstatement of owners' equity will increase gradually during the early part (about one-half) of the lease and then gradually decrease during the latter part of the lease, disappearing at maturity.
7. Operating costs and financial costs will be confused and not comparable.
8. Inventories will be overvalued because they will include financial expenses.

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[5] Ibid.

9. Significant ratios will be distorted; the following will be materially understated:
    a. Debt/Equity
    b. Fixed assets/Total assets
    c. Fixed assets/Equity
10. As a result of (8) above, the amount of working capital and the current ratio will be overstated; this may be material in some situations."[6]

Such lease arrangements are, in substance, a method of financing whereby the right to the use of facilities is obtained. Although not considered debt from a legal point of view, such leases are obligations closely resembling various forms of debt.

Another important consideration is the way in which the financial community regards lease obligations. A recent survey by R. F. Vancil and R. N. Anthony[7] conducted among the major insurance companies, banks, investment bankers, and rating services gives some insight into this.

"1. With regard to long-term leases (those with terms of three years or more), 81 per cent of the respondents considered them a form of debt, almost all ranking them with senior or secured debt.

2. Regarding shorter term leases, there was somewhat of a divergence of opinion between long-term investors and shortterm lenders. Some 69 per cent of the commercial banks regarded them as debt, while only half of the insurance companies shared this view. This undoubtedly reflects the basic difference in their point-of-view, the commercial bank being concerned with the short-term picture and the insurance company taking the longer view."

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[6]Willard J. Graham, and Harold Q. Langenderfer, "Reporting of Leases: Comment on A.P.B. Opinion No.5," The Journal of Accountancy, Vol. 119, No. 3 (March 1965), p. 61.

[7]Richard F. Vancil, and R. N. Anthony, "Financial Community Looks at Leasing," Harvard Business Review, Vol. 37, No. 6 (November 1959), p. 119.

The following items are summarized findings of the survey of insurance companies, banks, investments bankers, and rating services.[8]

> "1. The use of lease financing is relatively common in American industry. Nearly 50 per cent of the industrial corporations surveyed are parties to long-term leases, and this percentage rises to 88 per cent for retail and merchadising concerns, and to 93 per cent for integrated oil companies. The number of companies engaged in long-term leasing appears to increase as the percentage of debt to capital structure increases.
>
> 2. Less than 50 per cent of the respondents (other than utilities that have loan agreements restricting or limiting the incurrence of additional long-term debt also have effective restrictions concerning the incurrence of additional long-term lease obligations.
>
> 3. Restrictions against long-term leasing almost always apply to real estate, but in over 25 per cent of the cases a restriction is also applicable to equipment and other chattels."

The tabulation shows that 86 per cent of the analysts in the survey group regard long-term leasing as a type of capital, and practically all of these regard it as equivalent to debt. A strong majority of these analysts (72 per cent) consider long-term leases as equal to senior corporate debt (i.e., unsecured debentures or secured long-term debt).

Of the institutions replying to the Harvard Survey, 77 per cent said that in analyzing financial statements they either treat lease payments as a fixed charge or capitalize them, or both. Of the respondents, 81 per cent said they regard the security of long-term lease obligations as comparable to that of debt.

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[8]*Ibid.*, p. 130

The Effect of Leasing on Financial Ratios

Two studies are of prime importance in the study of financial ratios as affected by leasing: a detailed analysis of leasing by Donald R. Gant, and an analysis of the effects of leasing on financial ratios by A. Tom Nelson.[9] Both of these men are noted in their field and are not connected with any leasing company.

Gant presents a hypothetical case in which the balance sheet, income statement, financial ratios and analysis of changing levels of operating income are presented for a company that does not lease, and the figures are then modified for a company that does lease.

> "It can be seen that the transaction has resulted in a substantial improvement in the conventional financial ratios, giving the outward appearance of a strengthening of the company's credit standing. But what has taken place that would justify this marked improvement? The company has exchanged one obligation for another carrying a higher interest rate, and in the process has given away title to its plant and with it any residual value that it may have at the expiration of the lease.
>
> It still is using the same actual amount of capital and has the same actual amount of long-term obligations. Its real capital structure (not the one of its balance sheet) continues to exert substantially the same leverage effect on the common share earnings."[10]

Tax Implication of Lease-Purchase Agreements

There have been instances where the purpose of the leasing arrangements was to obtain a tax deduction for rentals paid rather than

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9A. Tom Nelson, "Capitalising Leases — The Effect on Financial Ratios," The Journal of Accountancy, Vol. 116, No. 7 (July 1963), pp. 53-56.

10Donald R. Gant, "Illusion in Lease Financing," Harvard Business Review, Vol. 37, No. 2 (March 1959), p. 131.

for depreciation. This aspect has been of growing concern to the Internal Revenue Service; and in a series of rulings (Internal Revenue Ruling 55-540, 55-541, 55-542) the Internal Revenue Service has outlined certain elements which, if existent in a contract, would require that for federal income tax purposes the transactions be treated as a time purchase and not as a lease.

One advantage is the possibility of cash-flow advantages through the more rapid write-offs of the leased asset. This used to represent a substantial advantage for leasing, but this advantage has been largely nullified by the accelerated depreciation option introduced in the 1954 code and new service life guidelines in 1962.

There is a possible advantage of being able to write off land values for tax purposes through leasing. The validity of this advantage depends largely upon the extent to which the lessee discounts the potential value of the land at the expiration of the lease.

CHAPTER III

RESULTS AND FINDINGS

The Classifications

Various classifications were established before tabulating this study to aid in presenting the results and findings. Commercial printers were placed into classes according to the type of printing process they employ. They were categorized into 9 title groups until it was found that some groups had no respondents and others had only one respondent. The groups were then realigned:

1: Lithographer and Letterpress Printer

2: Letterpress Printer

3: Lithographer

4: Lithography, Letterpress and other printing

5: Other

The number of respondents in each class was 84, 13, 35, 25, and 21 respectively. Class 5 was established for 21 of the 178 commercial printers who either did not fall into one of the other four classifications or did not provide full information. The commercial printers were also divided as to whether they leased or did not lease. Tables 2 through 6 are the presentation of data of printers who did not lease and Tables 7 through 22 are the presentation of data of printers who leased equipment.

For additional ease of presentation, classes 1, 2, 3, 4, and 5 were divided into three subclasses. Subclasses were determined by the gross sales of the firms during the past year. The subclasses, designated A, B, and C, were established as follows:

A: $500,000 to $5,000,000 (59.6 per cent)

B: more than $5,000,000 (20.8 per cent)

C: not indicated (19.6 per cent)

The data in Table 1 explain these classifications, show the number and percentage of respondents in each class, and present the percentage of all respondents who lease equipment. Note that 2B and 2C are null classes because none of the commercial letterpress printers use leasing. Note that 27.1 per cent of all respondents used leasing to some extent. Note also that the higher percentages of leasing fall into subclass B or larger firms with gross sales of more than $5 million.

<u>Printers Who Do Not Lease</u>

Table 2 was designed to show: (1) the number of firms that would consider leasing a particular type of equipment, and (2) the percentage of times each piece was mentioned. A comparison will be drawn later between leasing and non-leasing firms to show the difference between what they would like to lease and what is now being leased.

The data in Table 2 show that printers mentioned presses 73 times and computers 60 times. This was 29.9 and 24.6 per cent respectively of the total number of responses.

Possibly one of the reasons for the large response in these two classifications of equipment is that press manufacturers are advertising that they lease equipment. Computers, on the other hand, are normally leased because the purchase price is often prohibitive for the individual firm.

Table 1. Total Number of Respondents and the Percentage Who Lease Equipment

Class	Number of respondents who do not lease	Number of respondents who lease	Per cent leasing
1A	44	8	15.4
1B	9	7	43.7
1C	14	2	12.5
2A	8	1	11.1
2B	1	—	0.0
2C	3	—	0.0
3A	22	3	12.0
3B	5	2	28.6
3C	2	1	33.3
4A	11	3	21.4
4B	4	4	50.0
4C	2	1	33.3
5A	4	2	33.3
5B	2	3	60.0
5C	9	1	10.0
Total	140	38	27.1

Classifications

1: Lithographer and Letterpress

2: Letterpress

3: Lithographer

4: Lithography, Letterpress and other

5: Other

A: $500,000 - 5,000,000

B: 5,000,001 and over

C: not indicated

Typesetting, photo-typesetting, photo-typesetting in conjunction with a computer, bindery, office equipment and entire plant varied in response from 4.5 to 11.1 per cent.

The data in Table 3 show the percentage of interest in leasing of non-leasing printers. Of the 140 respondents 122, or 87.2 per cent, were not interested in leasing at the time of the study. Some printers elaborated on this point, saying that they regarded leasing as a tool only for those firms that are poorly capitalized. Fourteen, or 10 per cent were considering leasing and 3, or 2.1 per cent were actively considering leasing.

The data in Table 4 show the sources from which companies not leasing would consider leasing. The largest number, 36.3 per cent, of the firms did not know which source they would choose. Manufacturers ranked second with 35.2 per cent, and a combination of leasing companies and manufacturers 15.4 per cent. Leasing companies were preferred by 13.3 per cent of the respondents.

The data in Table 5 show the attitudes of non-leasing printers toward leasing as a means of financing equipment. Again, as with sources from which printers would lease, no policy had been established by 35.6 per cent of the respondents. Only 2.3 per cent considered leasing a permanent part of management thinking. The other three responses averaged approximately 20 per cent each and were considered negative responses toward leasing.

Table 6 shows the major reasons given for leasing by printers who do not lease. The three major reasons were: (1) to conserve working capital -- 41.9 per cent, (2) to guard against early obsolescence

Table 2. Percentage of Types of Equipment Non-Leasing Printers Would Lease

Class	Presses	Typesetting	Photo-typesetting	Photo-typesetting with computer	Bindery	Office equipment	Computers	Entire plant
1A	26	7	4	12	10	8	23	3
1B	5	—	1	1	1	1	5	2
1C	8	4	4	2	3	1	8	2
2A	6	—	1	—	2	1	1	1
2B	1	—	—	—	—	—	—	—
2C	1	—	—	—	—	—	—	—
3A	15	2	3	3	8	6	6	1
3B	2	—	—	1	1	—	—	—
3C	—	—	—	—	—	—	1	—
4A	4	1	1	1	2	2	5	1
4B	1	—	—	—	—	1	4	1
4C	1	—	1	—	—	—	2	—
5A	1	—	—	—	—	1	2	—
5B	2	—	—	—	—	1	2	—
5C	—	—	1	—	—	1	1	—
Total	73	14	16	20	27	23	60	11
%	29.9	5.7	6.6	8.2	11.1	9.4	24.6	4.5

Table 3. Interest in Leasing of Printers
Who Do Not Currently Lease

Class	Actively considering	Considering	Not interested	Do not know
1A	2	6	36	—
1B	—	2	7	—
1C	—	—	14	—
2A	—	—	7	1
2B	—	—	1	—
2C	—	—	3	—
3A	1	—	21	—
3B	—	—	5	—
3C	—	1	1	—
4A	—	1	10	—
4B	—	1	3	—
4C	—	—	2	—
5A	—	1	3	—
5B	—	1	1	—
5C	—	1	8	—
Total	3	14	122	1
%	2.1	10.0	87.2	.7

Table 4. Sources from Which Companies Not Leasing Would Consider Leasing

Class	Manufacturers	Leasing companies	Both	Do not know
1A	9	4	6	12
1B	—	2	—	3
1C	5	—	1	3
2A	2	1	—	2
2B	—	—	1	—
2C	1	—	—	1
3A	6	1	4	3
3B	1	2	—	—
3C	1	—	—	—
4A	1	2	1	3
4B	2	—	—	1
4C	1	—	—	1
5A	2	—	—	2
5B	1	—	1	—
5C	—	—	—	2
Total	32	12	14	33
%	35.2	13.3	15.4	36.3

Table 5. Attitudes of Printers Not Leasing Toward Leasing as a Means of Financing

Class	Permanent part of management thinking	Temporary use to conserve working capital	Used only in an emergency	Not to be used	Policy has not been established
1A	—	12	14	5	10
1B	1	3	3	—	2
1C	—	2	4	2	6
2A	1	3	—	1	3
2B	—	1	—	—	—
2C	—	—	1	1	—
3A	—	4	4	5	9
3B	—	1	—	3	1
3C	—	—	—	1	1
4A	—	2	1	—	6
4B	1	—	—	1	2
4C	—	—	—	—	2
5A	—	—	—	1	3
5B	—	1	—	1	—
5C	—	—	—	5	2
Total	3	29	27	26	47
%	2.3	21.9	20.5	19.7	35.6

Table 6. Major Reasons Printers Who Do Not Lease, Would Lease

Class	Conserve working capital	Obtain equipment without investment	Improve cash flow	Obtain tax-timing benefits	Obtain faster writeoff of equipment costs	Obtain longterm financing	To guard against early obsolescence
1A	14	9	3	3	—	2	10
1B	4	—	1	—	—	1	3
1C	6	2	—	—	—	—	5
2A	4	1	1	2	—	—	—
2B	1	—	—	—	—	—	—
2C	1	1	—	—	—	—	—
3A	11	4	—	1	1	1	2
3B	2	1	—	—	—	—	1
3C	—	—	—	—	—	—	1
4A	3	1	2	2	—	—	2
4B	—	—	1	—	—	1	2
4C	1	1	—	—	—	—	—
5A	2	—	—	—	1	—	1
5B	2	—	—	—	—	—	—
5C	1	—	—	—	—	—	2
Total	52	20	8	8	2	5	29
%	41.9	16.1	6.5	6.5	1.6	4.0	23.4

—23.4 per cent, and (3) to obtain equipment without investment — 16.1 per cent. The four other responses varied between 1.6 and 6.5 per cent.

Printers Who Lease

Table 7 shows the growth in leasing of the 38 respondents who lease equipment. Before 1955, 21.0 per cent of the commercial printers were leasing; this percentage held constant until 1958. Note that the first adopters of leasing were the larger printing firms in classes 1, 4, and 5. The percentage leasing increased from 21.0 per cent in 1957 to 89.5 per cent in 1966, a gain of 68.5 per cent. The largest gain was the 15.8 per cent recorded in 1960 which was largely the result of medium size firms adopting leasing. It is important to note that in 1966 only 89.5 per cent of the firms were leasing. This is apparently because four firms found leasing not to be the best method for their particular firm to finance equipment.

Throughout this chapter comparisons will be drawn between the findings of this study and another done for Business Management in 1962.[11]

According to the 1962 study, 30.7 per cent of all industries were leasing in 1955 compared to 54.6 per cent in 1960. The adoption of leasing in the printing industry was slightly below these figures — 21.0 per cent in 1955 and 44.7 per cent in 1960.

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[11]Sheridan, loc. cit.

Table 8 shows the future leasing plans of companies currently leasing equipment. Of the 37 respondents, 54.1 per cent said they would maintain their current lease volume, 24.3 per cent will increase leasing, 13.5 per cent will reduce leasing but continue to lease, and 8.1 per cent will eliminate leasing. The 1962 study showed 52.6 per cent plan to maintain current lease volume.

Of those who said they would increase leasing, 77.8 per cent were larger printing firms. Thirty-five per cent of the larger firms also said they would maintain current lease volume.

Table 9 shows the types of equipment commercial printers were leasing. Computers were leased by 63.9 per cent of the respondents and office equipment was leased by 38.9 per cent, presses ranked third with 33.3 per cent. The six other categories of equipment varied in response from 0.0 to 16.7 per cent.

Printers who lease agreed in most areas of equipment with those who do not lease, an exception was computers and office equipment. Nearly one-fourth (24.6 per cent) of non-leasing printers indicated they would probably lease computers whereas 63.9 per cent of leasing printers so indicated. Non-leasing printers named office equipment 9.4 per cent, whereas leasing printers responded 38.9 per cent to this category.

In the 1962 study it was found that 35.6 per cent were leasing office equipment. This compares favorably to the printing industry in which 38.9 per cent of the respondents leased office equipment.

Table 10 shows from whom printers were leasing equipment. Manufacturers, leasing companies and a combination of both were used

Table 7. Years in Which Commercial Printers Leased Equipment

Class	Before 1955	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966
1A	—	—	—	—	—	2	2	3	3	3	3	5	6
1B	3	3	3	3	3	3	4	5	5	5	6	7	7
1C	1	1	1	1	1	1	1	2	2	2	2	2	2
2A	—	—	—	—	—	—	—	1	1	1	—	—	—
3A	—	—	—	—	—	—	2	2	2	2	2	2	3
3B	—	—	—	—	—	—	1	1	1	1	2	2	2
3C	—	—	—	—	1	1	1	1	1	1	1	1	1
4A	—	—	—	—	—	—	1	—	—	—	2	3	3
4B	2	2	2	2	2	2	3	3	4	4	4	3	3
4C	—	—	—	—	—	—	—	—	—	—	—	—	1
5A	—	—	—	—	—	—	—	—	—	1	1	1	2
5B	2	2	2	2	2	2	2	2	2	2	3	3	3
5C	—	—	—	—	—	—	—	—	—	1	1	1	1
Total	8	8	8	8	9	11	17	20	21	23	27	30	34
%	21.0	21.0	21.0	21.0	23.7	28.9	44.7	52.6	55.3	60.5	71.0	78.9	89.5

Table 8 shows the future leasing plans of companies currently leasing equipment. Of the 37 respondents, 54.1 per cent said they would maintain their current lease volume, 24.3 per cent will increase leasing, 13.5 per cent will reduce leasing but continue to lease, and 8.1 per cent will eliminate leasing. The 1962 study showed 52.6 per cent plan to maintain current lease volume.

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In the 1962 study it was found that 35.6 per cent were leasing office equipment. This compares favorably to the printing industry in which 38.9 per cent of the respondents leased office equipment.

Table 10 shows from whom printers were leasing equipment. Manufacturers, leasing companies and a combination of both were used

Table 8. Future Plans Toward Leasing of Companies That Currently Lease

Class	Increase leasing	Maintain current lease volume	Reduce leasing volume, but continue to lease	Eliminate leasing
1A	—	3	2	3
1B	3	4	—	—
1C	—	2	—	—
2A	—	—	1	—
3A	1	2	—	—
3B	1	1	—	—
3C	—	1	—	—
4A	—	3	—	—
4B	1	2	1	—
4C	—	—	—	—
5A	1	1	—	—
5B	2	—	1	—
5C	—	1	—	—
Total	9	20	5	3
%	24.3	54.1	13.5	8.1

Table 9. Types of Equipment Commercial Printers Are Currently Leasing

Class	Presses	Typesetting	Photo-typesetting	Photo-typesetting with computer	Bindery	Office equipment	Computers	Entire plant	Other
1A	4	1	2	—	1	—	3	—	—
1B	1	—	1	—	1	4	6	—	—
1C	—	—	—	—	—	1	1	—	—
2A	1	—	—	—	—	—	1	—	—
3A	1	—	—	—	2	—	1	—	—
3B	—	—	—	—	1	—	2	—	—
3C	—	—	—	—	—	1	—	—	—
4A	1	—	—	—	—	1	2	—	—
4B	2	—	—	1	—	2	3	1	—
4C	—	—	—	—	—	—	—	—	—
5A	1	—	—	—	—	2	—	—	—
5B	1	1	—	—	1	2	3	1	—
5C	—	—	—	—	—	1	1	—	—
Total	12	2	3	1	6	14	23	2	0
%	33.3	5.5	8.3	2.8	16.7	38.9	63.9	5.0	0

Table 10. Where Commercial Printers Are Leasing From

Class	Manufacturers	Leasing companies	Both
1A	3	4	1
1B	3	1	3
1C	1	1	--
2A	--	--	1
3A	--	2	1
3B	1	--	1
3C	--	1	--
4A	1	1	1
4B	1	1	2
4C	--	--	--
5A	1	1	--
5B	1	--	2
5C	1	--	--
Total	13	12	12
%	35.2	32.4	32.4

about equally. Both leasing and non-leasing firms indicated a preference of 35.2 per cent for manufacturers. They differed however, in regard to leasing companies and in their response to a combination of both sources.

Table 11 shows the attitudes of leasing commercial printers toward leasing as a means of financing. They responded 52.9 per cent to leasing being a permanent part of management thinking, 29.5 per cent to leasing being a method for temporary use to conserve working capital, and 8.9 per cent to leasing as a combination of these. The other three response categories each contained 2.9 per cent of the respondents.

When comparing this table with Table 5 it can be seen that printers who lease are favorable toward leasing whereas printers who do not lease have unfavorable attitudes toward leasing.

In the 1962 study 44.9 per cent termed leasing a permanent part of management thinking, compared to 52.9 per cent with this belief in this study.

Table 12 presents the percentage interest of printers who lease equipment by sale-leasebacks. Of the 36 respondents to this question, 61.1 per cent were not interested in sale-leasebacks. Possibly this brings to light that leasing is primarily thought of as a method for financing new, rather than used equipment. Another possible explanation is that a leasing company will purchase only relatively new equipment for leaseback.

Of the respondents, 22.2 per cent have negotiated sale-leasebacks, 11.1 per cent were considering sale-leasebacks and 5.6 per cent were interested in future sale-leasebacks.

Table 11. Attitudes of Commercial Printers Who Currently Lease Toward Leasing as a Means of Financing

Class	Permanent part of management thinking	Temporary use to conserve working capital	Used only in an emergency	Not to be used	Policy has not been established	Combination of 1 and 2
1A	2	3	1	—	1	—
1B	3	2	—	—	—	2
1C	1	1	—	—	—	—
2A	—	1	—	—	—	—
3A	2	—	—	—	—	—
3B	2	—	—	—	—	—
3C	—	1	—	—	—	—
4A	2	1	—	—	—	—
4B	3	—	—	1	—	—
4C	—	—	—	—	—	—
5A	2	—	—	—	—	—
5B	1	1	—	—	—	1
5C	—	—	—	—	—	—
Total	18	10	1	1	1	3
%	52.9	29.5	2.9	2.9	2.9	8.9

Table 12. Interest of Commercial Printers Who Lease in Sale-Leasebacks

Class	Negotiated sale-leaseback	Considered sale-leaseback	Interested in future sale-leaseback	Not interested in sale-leasebacks
1A	1	---	---	6
1B	2	1	---	4
1C	---	---	---	2
2A	---	---	---	1
3A	1	---	1	1
3B	1	---	---	1
3C	---	1	---	---
4A	---	1	1	1
4B	1	---	---	3
4C	---	---	---	1
5A	1	---	---	1
5B	1	1	---	1
5C	---	---	---	---
Total	8	4	2	22
%	22.2	11.1	5.6	61.1

The printing industry showed a higher percentage of sale-leasebacks, 22.2 per cent, than did all industry (8.4 per cent) in the 1962 study.

Table 13 shows the volume of leasing of the 38 respondents who currently lease equipment. The largest category was leases between $100,000 and $499,000, with 34.2 per cent. The next largest category was leases between $50,000 and $99,999, with a response rate of 21.1 per cent.

In the 1962 study 4.3 per cent of the companies were leasing $1 million or more, whereas in this study 10.5 per cent of the 38 respondents were leasing $1 million or more.

Tables 14, 15, and 16 show the reasons for leasing that ranked first, second, and third. Conservation of working capital was chosen by 43.6 per cent of the respondents to rank first; the second reason was to obtain equipment without investment, and Table 16 shows that the same reason had the largest number of respondents rank it third.

The most important difference between all industry and the printing industry in regard to major reasons for leasing was that leasing will guard against early obsolescence. This reason ranked much higher than in the all-industry study in 1962.

Table 17 shows the attitudes toward leasing company claims that are often used as selling points. Leasing literature indicates that leased equipment depreciates faster than owned equipment mainly because it will not receive the equivalent care of an owned piece of equipment. This statement was regarded as false by 60.5 per cent of the respondents.

Table 13. Current Volume of Leasing

Class	$1,000,000 or more	$500,000 - 999,999	$100,000 - 499,999	$50,000 - 99,999	$25,000 - 49,999	$5,000 - 24,999	under $4,999
1A	—	—	2	4	1	1	—
1B	2	—	1	1	1	2	—
1C	—	—	2	—	—	—	—
2A	—	—	1	—	—	—	—
3A	—	—	1	2	—	—	—
3B	1	—	1	—	—	—	—
3C	—	—	—	—	—	1	—
4A	—	—	3	—	—	—	—
4B	—	2	1	—	—	1	—
4C	—	—	—	—	1	—	—
5A	—	—	—	1	—	—	1
5B	1	—	1	—	—	1	—
5C	—	—	—	—	1	—	—
Total	4	2	13	8	4	6	1
%	10.5	5.3	34.2	21.1	10.5	15.8	2.6

Table 14. Major Reasons for Leasing That Ranked First

Class	Conserve working capital	Obtain equipment without investment	Improve cash flow	Obtain tax-timing benefits	Obtain faster writeoff of equipment costs	Obtain long-term financing	Increase borrowing capacity	Obtain equipment for pilot projects	To guard against early obsolescence
1A	4	1	—	—	—	—	1	1	1
1B	5	1	1	—	—	—	—	1	1
1C	—	2	—	—	—	—	—	—	—
2A	—	—	1	—	—	—	—	—	—
3A	2	—	—	—	1	—	—	—	—
3B	1	—	—	—	—	—	—	—	1
3C	1	—	—	—	—	—	—	—	—
4A	—	—	—	—	—	—	1	—	2
4B	2	—	—	—	—	—	—	1	1
4C	—	—	—	—	—	—	—	—	1
5A	1	—	—	—	—	—	1	—	—
5B	1	—	—	—	—	1	—	—	1
5C	—	—	—	—	—	—	—	—	—
Total	17	4	2	—	1	1	3	3	8
%	43.6	10.3	5.1	0	2.6	2.6	7.7	7.7	20.4

Table 15. Major Reasons for Leasing That Ranked Second

Class	Conserve working capital	Obtain equipment without investment	Improve cash flow	Obtain tax-timing benefits	Obtain faster writeoff of equipment costs	Obtain long-term financing	Increase borrowing capacity	Obtain equipment for pilot projects	To guard against early obsolescence
1A	—	1	2	—	2	—	—	—	—
1B	—	—	1	—	—	—	1	1	1
1C	—	—	—	1	—	—	—	—	1
2A	1	—	—	—	—	—	—	—	—
3A	—	1	—	1	—	1	—	—	—
3B	—	1	—	—	—	—	—	—	—
3C	—	—	—	—	—	1	—	—	—
4A	1	1	—	—	—	—	—	—	—
4B	—	1	—	—	—	1	—	—	1
4C	—	—	—	—	1	—	—	—	—
5A	—	1	—	—	1	—	—	—	—
5B	—	1	—	1	—	—	—	—	—
5C	—	—	—	—	—	—	—	—	—
Total	2	7	3	3	4	3	1	1	3
%	7.4	25.9	11.1	11.1	14.9	11.1	3.7	3.7	11.1

Table 16. Major Reasons for Leasing That Ranked Third

Class	Conserve working capital	Obtain equipment without investment	Improve cash flow	Obtain tax-timing benefits	Obtain faster writeoff of equipment costs	Obtain long-term financing	Increase borrowing capacity	Obtain equipment for pilot projects	To guard against early obsolescence
1A	—	1	—	—	1	—	1	—	1
1B	—	1	—	—	—	—	—	—	1
1C	1	—	—	—	—	—	—	—	—
2A	—	1	—	—	—	—	—	—	—
3A	—	—	—	—	1	—	1	—	—
3B	—	—	—	—	1	—	—	—	—
3C	—	—	—	—	1	—	—	—	—
4A	1	—	—	1	—	—	—	—	—
4B	—	1	2	—	—	—	—	—	—
4C	—	—	—	—	—	—	—	1	—
5A	—	1	1	—	—	—	—	—	—
5B	1	—	—	—	—	—	—	1	—
5C	—	—	—	—	—	—	—	—	—
Total	3	5	3	1	4	0	2	2	2
%	13.6	22.7	13.6	4.5	18.3	0	9.1	9.1	9.1

Table 17. Attitudes Toward Leasing Company Claims

Class	Leased equipment depreciates faster than owned equipment		Leasing firms provide specialized legal and tax advice		Leasing avoids any dilution of common stock ownership or control	
	No	Yes	No	Yes	No	Yes
1A	5	4	4	3	3	4
1B	4	2	4	1	4	1
1C	2	—	2	—	2	—
2A	1	—	1	—	—	1
3A	2	1	2	1	3	—
3B	—	3	1	—	—	1
3C	1	—	1	—	1	—
4A	1	2	1	1	1	1
4B	3	1	4	—	3	1
4C	—	1	—	1	—	1
5A	1	1	1	1	1	—
5B	3	—	2	1	2	1
5C	—	—	—	—	—	—
Total	23	15	23	9	20	11
%	60.5	39.5	71.9	28.1	64.5	35.5

Another claim often made is that many leasing companies provide specialized tax and legal advice. This statement was regarded as false by 71.9 per cent of the respondents.

The third claim made by leasing companies is that leasing avoids any dilution of common stock ownership or control. Respondents again disagreed with this claim, by 64.5 per cent.

Table 18 shows the percentage of firms that pay various rates of interest for their lease. The largest category was 10 per cent and over — 42.4 per cent of the respondents. The next largest category was 6 to 7.99 per cent — 33.3 per cent of the respondents. The category 2 to 3.99 per cent contained 6.1 per cent of the respondents. Money is not normally available to a firm this cheaply, so this figure is questionable.

Table 19 shows the percentage usage of three types of lease payment schedules. The even-payment schedule was used by 86.1 per cent of the respondents and the declining payment schedule by 8.3 per cent. A combination of both was used by 5.6 per cent. Note that the "humpback" lease schedule was not used by any of the respondents, even though this schedule is useful to a printing firm leasing a large piece of equipment.

Table 20 shows the percentage of respondents who found tax benefits in leasing equipment. The largest group of respondents, 41.2 per cent, disagreed with the statement: leasing does not save taxes but merely postpones them to a later period.

When asked if their taxes increased, 58.3 per cent did not know, 25.0 per cent answered no and 16.7 per cent answered yes.

Table 18. Percentage Per Year of the Original Purchase Price that is Charged as Leasing Charges Less Service or Maintenance Charges

Class	2 - 3.99	4 - 5.99	6 - 7.99	8 - 9.99	10 and over
1A	—	—	3	—	5
1B	1	1	1	1	2
1C	—	—	1	—	1
2A	—	—	—	—	1
3A	—	1	1	—	—
3B	—	1	1	—	—
3C	—	—	—	1	—
4A	1	—	1	—	—
4B	—	—	2	—	1
4C	—	—	1	—	—
5A	—	—	—	—	2
5B	—	1	—	—	2
5C	—	—	—	—	—
Total	2	4	11	2	14
%	6.1	12.1	33.3	6.1	42.4

Table 19. Extent of Various Types of Lease Payment Schedules

Class	Declining payment schedule	Even payment schedule	"Humpback lease schedule"	Combination of 1 and 2
1A	2	6	—	—
1B	—	5	—	1
1C	1	1	—	—
2A	—	1	—	—
3A	—	3	—	—
3B	—	2	—	—
3C	—	1	—	—
4A	—	3	—	—
4B	—	3	—	1
4C	—	1	—	—
5A	—	2	—	—
5B	—	3	—	—
5C	—	—	—	—
Total	3	31	0	2
%	8.3	86.1	0	5.6

Table 20. Tax Benefits of Leasing

Class	Leasing does not save taxes but merely postpones them to a later period			Taxes increased		
	Yes	No	Don't Know	Yes	No	Don't Know
1A	2	3	3	—	—	3
1B	3	3	—	—	1	1
1C	—	2	—	—	—	—
2A	1	—	—	1	—	—
3A	1	1	—	—	—	—
3B	—	1	1	—	1	—
3C	1	—	—	—	—	1
4A	1	—	2	—	1	—
4B	1	2	1	—	—	1
4C	—	1	—	—	—	—
5A	—	—	1	—	—	—
5B	1	1	1	1	—	1
5C	—	—	—	—	—	—
Total	11	14	9	2	3	7
%	32.4	41.2	26.4	16.7	25.0	58.3

In the literature on leasing it has been generally held that leasing will increase taxes and also postpone taxes. The data presented possibly refute this assumption but another possible reason would be that firms have not fully investigated the tax standpoint of leasing. Only in a firm of large size which leases a majority of equipment would the tax benefits be readily discernible.

Table 21 presents the advantages and disadvantages of leasing when compared to equity financing, and Table 22 presents the advantages and disadvantages of leasing when compared to debt financing. Most of the respondents did not make a distinction between the two types of financing. The respondents felt that the chief advantage of leasing when compared to equity financing was better financial ratios (22.1 per cent) and the chief disadvantage high cost (58.3 per cent). When comparing debt financing to leasing 35.8 per cent stated better ratios as the chief advantage and 53.3 per cent stated high cost as the chief disadvantage.

Table 21. Advantages and Disadvantages of Leasing Compared to Equity Financing

Advantages	Number	Percentage	Disadvantages	Number	Percentage
Cash flow	3	16.7	Lower net worth	4	33.3
Better ratios	4	22.1	High cost	7	58.3
No down payment	1	5.6	Maintenance	1	8.4
Tax benefits	1	5.6			
No dilution of ownership	2	11.0			
Improve working capital	3	16.7			
Low cost	1	5.6			
Guards against obsolescence	3	16.7			
Total	18	100.0	Total	12	100.0

Table 22. Advantages and Disadvantages of Leasing Compared to Debt Financing

Advantages	Number	Percentage	Disadvantages	Number	Percentage
No increase in debt	1	7.1	Cost	8	53.3
Cash flow	2	14.3	No equity	4	26.7
No down payment	2	14.3	Reduces earnings	1	6.7
Better ratios	5	35.8	"Hidden charge"	2	13.3
Increase borrowing capacity	2	14.3			
High working capital	1	7.1			
Payments charged against costs	1	7.1			
Total	14	100.0	Total	15	100.0

CHAPTER IV

SUMMARY AND CONCLUSIONS

Leasing of equipment is not unusual in the printing industry, as evidenced by the slightly lower percentage of acceptance when comparing printing to all industry. Of the respondents, 27.1 per cent were using leasing to some extent as a means of equipment financing. It can be seen that leasing is becoming a method of finance that may spread throughout the printing industry. Printing firms are apparently beginning to realize that profit is made from the use of equipment and not solely from ownership.

This study found that printers who did lease had favorable attitudes toward leasing whereas printers who did not lease had unfavorable attitudes toward leasing. This latter factor presents a problem in the acceptance of leasing. Other forms of debt are not considered unfavorable, but leasing is so considered by non-leasing printers; therefore, the growth of leasing may be slow.

The major reasons printers gave for leasing equipment were to conserve working capital and to obtain equipment without investment. The chief advantage of leasing compared to other forms of financing was cited as better financial ratios; the chief disadvantage was its comparatively high cost.

Further study should be done in the area of capitalization of leases and analysis of financial statements of firms which lease.

BIBLIOGRAPHY

Accounting Principles Board of the American Institute of C.P.A.'s, September, 1964. "Opinion No. 5, Reporting of Leases in Financial Statements of Lessee," The Journal of Accountancy, Vol. 118, No. 11 (November 1964), pp. 63-66.

Backer, Morton (ed.). Handbook of Modern Accounting Theory (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1955).

Bethel, Lawrence L., Franklin S. Atwater, George H. E. Smith, and Harvey A. Stockman. Industrial Organization and Management (New York: McGraw-Hill Book Company, Inc., 1950).

Bonneville, Joseph Howard, and Lloyd Ellis Dewey. Organizing and Financing Business (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1947).

Cook, D. C. "Case Against Capitalizing Leases," Harvard Business Review, Vol. 41, No. 1 (January 1963), pp. 145-50.

Dauten, Carl A. Business Finance (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1948).

"Equipment Leasing Saves Capital Investment Funds," Inland and American Printer and Lithographer, Vol. 146, No. 10 (October 1960), p. 70.

Gant, Donald R. "Illusion in Lease Financing," Harvard Business Review, Vol. 37, No. 2 (March 1959), pp. 121-42.

Graham, Willard J., and Harold Q. Langenderfer. "Reporting of Leases: Comment on A.P.B. Opinion No. 5," The Journal of Accountancy, Vol. 119, No. 3 (March 1965), pp. 57-62.

Greenfield, H., and F. K. Griesinger. "Sale-Leasebacks and Leasing in Real Estate and Equipment Transactions," Controller, Vol. 27, No. 3 (March 1959), p. 134.

Guthmann, Harry G. The Analysis of Financial Statements (Englewood Cliffs, N. J.: Prentice-Hall, Inc., 1949).

Hennessy, John L. "Recording Lease Obligations and Related Property Rights," The Journal of Accountancy, Vol. 111, No. 3 (March 1961), pp. 40-46.

Hudders, Milton. "To Lease or Not to Lease, That is the Question." Unpublished convetion bulletin of the National Association of Photo-Lithographers, September 1961.

__________. "Printers and Lithographers Ask to Lease or Not to Lease," Inland and American Printer and Lithographer, Vol. 148, No. 11 (November 1961), pp. 62-64.

Jolivet, V. M. "Pros and Cons of Equipment Lease Financing," Management Review, Vol. 50, No. 4 (April 1961), pp. 54-56.

"Leasing as a Sales-Tool," Duns Review, Vol. 75, No. 2 (February 1960), p. 102.

"Lease-Purchase Plan Falls Flat," Business Week, No. 1435 (March 2, 1957), p. 139.

Myer, John N. Accounting for Non-Accountants (New York: New York University Press, 1957).

Myers, John H. "Summary and Conclusions from 'Reporting of Leases in Financial Statements'," The Journal of Accountancy, Vol. 113, No. 6 (June 1962), pp. 63-66.

Nelson, A. Tom. "Capitalizing Leases -- The Effect on Financial Ratios," The Journal of Accountancy, Vol. 116, No. 7 (July 1963), pp. 49-58.

"New Life on Leasing," Duns Review, Vol. 81, No. 4 (April 1963), pp. 65-66.

"New Muscle in Leasing," Business Week, No. 1545 (April 11, 1959), pp. 88-90.

Nyren, E. A. "Rentals, There's No Ceiling in Sight," Printers' Ink, Vol. 288, No. 4 (July 24, 1964), pp. 42-44.

"Pros and Cons of Leasing Equipment," Harvard Business Review, Vol. 33, No. 2 (March 1955), pp. 75-89.

Sheridan, R. "Equipment Leasing in the Printing Industry," Graphic Arts Monthly, Vol. 32, No. 10 (October 1960), pp. 24-26.

__________. "Look Before You Lease: Nine Areas to Check," Business Management, Vol. 149, No. 9 (September 1962), pp. 59-60.

Specthrie, Samuel Waldo. Industrial Accounting (Englewood Cliffs, N.J.: Prentice-Hall, Inc., 1963).

"Tax Implications of Lease-Purchase Agreements," Management Methods, Vol. 16, No. 6 (June 1959), pp. 67-68.

"Thriving in Business Without Any Sales," Business Week, No. 1751 (March 23, 1963), pp. 140-1.

Vancil, Richard F. "Lease or Borrow -- New Method of Analysis," Harvard Business Review, Vol. 39, No. 5 (September 1961),

Vancil, Richard F., and R. N. Anthony. "Financial Community Looks at Leasing," Harvard Business Review, Vol. 37, No. 6 (November 1959), pp. 113-30.

Walcott, Hailey D. "Financing Through Equipment Leasing in the Printing Industry." Unpublished bulletin of the Printing Industry of America, 1959.

White, H. R. "Should You Lease or Buy New Equipment," Inland and American Printer and Lithographer, Vol. 149, No. 9 (September 1962), pp. 59-60.

Zises, Alvin. "Disclosure of Long-Term Leases," The Journal of Accountancy, Vol. 11, No. 2 (February 1961), pp. 37-47.

APPENDIX A

Example of An Individual Questionnaire Sent to Commercial Printers

ANSWER THE FOLLOWING QUESTIONS ONLY IF YOU ARE NOT AT PRESENT LEASING

If you **were** to lease, what **type of equipment** would you consider leasing?:

_____(C1) Presses

_____(C2) Typesetting (Linotype, Ludlow, etc.)

_____(C3) Photo-typesetting

_____(C4) Photo-typesetting in conjunction with a computer

_____(C5) Bindery

_____(C6) Office equipment

_____(C7) Computers

_____(C8) Entire plant on a sale-leaseback arrangement

_____(C9) Other (specify) ____________________

C10 Is your plant at this time: (CHECK ONE)

_____(1) Actively considering leasing equipment

_____(2) considering leasing in the future

_____(3) not interested in leasing at present

_____(4) don't know what the company's plans are

C11 If your firm is considering leasing, who would you probably lease from:

_____(1) Manufacturers

_____(2) Leasing companies

____(3) Both leasing companies and manufacturers

____(4) Don't know, or not sure

C12 Does your company: (CHECK ONE)

____(1) consider leasing a permanent part of management thinking

____(2) consider leasing a good method for temporary use to conserve working capital

____(3) consider leasing a method to be used only in an emergency

____(4) consider leasing a method not to be used in financing

____(5) company policy on leasing has not been established

C13 If your company were to lease equipment what in your opinion would be the major reason for choosing leasing as a means of financing: (CHECK ONE)

____(1) Conserve working capital

____(2) Obtain equipment without investment

____(3) Improve cash flow

____(4) Obtain tax-timing benefits

____(5) Obtain faster writeoff of equipment costs

____(6) Obtain long-term financing

____(7) To guard against early obsolescence

____(8) Other (specify) ____________________

IF YOU ARE AT PRESENT LEASING PLEASE ANSWER THE FOLLOWING QUESTIONS:

In which of these years did your company lease equipment:

____(C14) before 1955 ____(C21) 1961

____(C15) 1955 ____(C22) 1962

_____(C16) 1956

_____(C17) 1957

_____(C18) 1958

_____(C19) 1959

_____(C20) 1960

_____(C23) 1963

_____(C24) 1964

_____(C25) 1965

_____(C26) 1966

C27 In your opinion will your company in the future be likely to:

_____(1) increase leasing

_____(2) maintain current lease volume

_____(3) reduce leasing volume, but continue to lease

_____(4) eliminate leasing

What type of equipment do you lease:

_____(C28) Presses

_____(C29) Typesetting (Linotype, Ludlow, etc.)

_____(C30) Photo-typesetting

_____(C31) Photo-typesetting in conjunction with a computer

_____(C32) Bindery

_____(C33) Office equipment

_____(C34) Computers

_____(C35) Entire plant on a sale-leaseback arrangement

_____(C36) Other (specify) ______________________________

C37 Are you leasing from:

_____(1) Manufacturers

_____(2) Leasing Companies

_____(3) Both leasing companies and manufacturers

C38 **Does your company:**

____(1) Consider leasing a permanent part of management thinking

____(2) Consider leasing a good method for temporary use to conserve working capital

____(3) Consider leasing a method to be used only in an emergency

____(4) Consider leasing a method not to be used

____(5) Company policy has not been established

C39 **Has your company:**

____(1) negotiated sale-leaseback of plant or equipment

____(2) considered sale-leaseback of plant or equipment

____(3) seemed interested in future sale-leasebacks

____(4) not been interested in sale-leasebacks

C40 **About how much in <u>current equipment value</u> do you lease:**

____(1) $1,000,000 or more

____(2) 500,000 - 999,999

____(3) 100,000 - 499,999

____(4) 50,000 - 99,999

____(5) 25,000 - 49,999

____(6) 5,000 - 24,999

____(7) under 4,999

Major reason for leasing equipment: (<u>Rank Three</u>; <u>1</u>,<u>2</u>,<u>3</u>)

____(C41) Conserve working capital

____(C42) Obtain equipment without investment

____(C43) Improve cash flow

_____(C44) Obtain tax-timing benefits

_____(C45) Obtain faster writeoff of equipment costs

_____(C46) Obtain long-term financing

_____(C47) Increase borrowing capacity

_____(C48) Obtain equipment for pilot projects

_____(C49) To guard against early obsolescence

_____(C50) Other (specity) ____________________

In light of leasing do you find these statements true:

C51_____(1) No _____(2) Yes Leased equipment depreciates faster than owned equipment

C52_____(1) No _____(2) Yes Leasing firms provide specialized legal and tax advice

C53_____(1) No _____(2) Yes Leasing avoids any dilution of common stock ownership or control

C54 What is the percentage per year of the original purchase price of the equipment that is charged as leasing charges less service or maintenance charges:

_____(1) 2 - 3.99

_____(2) 4 - 5.99

_____(3) 6 - 7.99

_____(4) 8 - 9.99

_____(5) 10 and over

C55 What type of lease do you have:

_____(1) Declining payment schedule

_____(2) Even payment schedule

_____(3) "Humpback lease schedule" (payment low in first and last years and higher in middle years)

_____(4) Other (specify) __________________________________

C56 Do you find that leasing does not save taxes but merely postpones them to a later period:

_____(1) Yes

_____(2) No

_____(3) Don't know

C57 If you answered <u>YES</u> to the above question did you find that your taxes increased:

_____(1) Yes

_____(2) No

_____(3) Don't know

With <u>equity financing</u> in mind, what do you feel is the major advantage and major disadvantage of leasing:

C58 Advantage____

C59 Disadvantage____

With <u>debt financing</u> in mind, what do you feel is the major advantage and major disadvantage of leasing:

C60 Advantage____

C61 Disadvantage____

C62 Check only the <u>ONE</u> classification that most nearly describes your company:

_____(1) Lithographer and Letterpress Printer

_____(2) Letterpress Printer

______(3) Lithographer

______(4) Lithography, Letterpress and other printing

______(5) Gravure Printer

______(6) Flexographic Printer

______(7) Screen Process Printer

______(8) Letterpress and other printing, except Lithography

______(9) Lithography and other printing, except Letterpress

C63 Is your printing plant:

______(1) Commercial

______(2) "Captive" or In-Plant

______(3) Other (specify) ______________________

C64 What is the average total employment in your plant at this address:

______(1) 19 or fewer

______(2) 20 - 49

______(3) 50 - 99

______(4) 100 - 249

______(5) 250 - 499

______(6) 500 or more

C65 All plant equipment evaluation at current market value $________

C66 Gross sales from all printing plant operations at this address:

$______________________________

PLEASE ENCLOSE THE QUESTIONNAIRE IN THE RETURN ENVELOPE AND MAIL.

No. THANK YOU

APPENDIX B

Example of Covering Letter That Accompanied the First Mailing of the Questionnaire

Dear Sir:

As a graduate student in Printing Management at South Dakota State University, I have chosen as a thesis topic, "Attitudes Toward and Extent of Leasing in the Printing Industry." By canvassing the nation's larger printing firms, it is my wish to determine the extent of leasing as a means of financing equipment and to determine some of the specific advantages and disadvantages of leasing.

Enclosed is a questionnaire which will give the necessary information to make this study. The questionnaire is divided into three parts: one, for those who do not lease; two, for those who do lease; three, demographic information. Please fill out the appropriate section of the questionnaire and the demographic information and return in the accompanying business reply envelope. The questionnaire is anonymous and no company's name will be used explicitly or implicitly in this study. The number on the questionnaire is for IBM coding only.

It is my belief that much value for the printing industry can come from a survey of this kind. I would appreciate the time and consideration you take in making this study possible.

If you would rather have another person in your organization, such as the financial officer, handle this matter, please feel free to do so.

If possible the results of this study will be published in one of the printing trade journals so that your organization will receive an overall view of leasing in the printing industry.

Very truly yours,

Raymond Joseph Prince

Enc. (2)

APPENDIX C

Example of Covering Letter that Accompanied the Second Mailing of the Questionnaire

Dear Sir:

I need your help. The results of my questionnaire about "Attitudes Toward and Extent of Leasing in the Printing Industry" should be a great benefit to the printing and allied industries.

Your cooperation is greatly needed. The return of the questionnaire, sent to you two weeks ago, is most vital to this study. If you did not happen to receive it, I am enclosing another. The questionnaire is divided into three parts: one, for those who do not lease; two, for those who do lease; three, demographic information. Please fill out the appropriate section of the questionnaire and the demographic information and return in the accompanying business reply envelope. The questionnaire is anonymous and no company's name will be used explicitly or implicitly in this study. The number on the questionnaire is for IBM coding only.

If possible the results of this study will be published in one of the printing trade journals so that your organization will receive an overall view of leasing in the printing industry.

Very truly yours,

Enc.(2) Raymond Joseph Prince

APPENDIX D

Definition of Terms

Financial Lease. A financial lease is defined as a contract under which the lessee agrees to make a series of payments to the lessor which in total exceeds the purchase price of the asset acquired. Typically, payments under a financial lease are spread over a period of time equal to the major portion of the useful life of the asset acquired. During this initial term of the lease, the contract is noncancelable by either party; that is, the lessee is irrevocably committeed to continue leasing the asset. Usually the financial lease would be for three to five years, and if the credit risk is above average the leasing companies are influenced by the life of the asset and endeavor to recover their purchase price in about seventy-five to eighty per cent of the useful life of the asset. One of the reasons for this is that a piece of equipment under lease receives harder use and will not have as long a life as equipment that is owned.

Lease. Leases that will be considered in this thesis will usually conform to the following pattern:

1. The "basic" or "firm" lease period is fewer than ten years, with a usual term of three to five years.

2. The total amount to be paid by the lessee as rent during the basic lease is determined by adding finance charges to the quoted list purchase price of the leased equipment.

3. Equipment is not returnable within the term of the basic lease. Contracts permitting returns specify that the amount